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The Relationship of Physical Fitness and Social Acceptance of Ninth Grade Girls

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THE RELATIONSHIP OF PHYSICAL FITNESS AND SOCIAL ACCEPTANCE OF NINTH GRADE GIRLS

by

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This Independent Study submitted by Hermelle Wilson in partial fulfillment of the requirements for the Degree of Master of Education from the University of North Dakota is hereby approved by Dr. Walter C. Koenig, the faculty advisor under whom the work has been done.

_____
(Advisor)

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ABSTRACT

Physical educators claim numerous attributes of their program, namely, teaching the whole person; his or her social, mental, and physical well-being. This study purports to measure the relationship of the social status in comparison with physical fitness of ninth grade girls.

The test used to measure the fitness level was the AAHPER Fitness Test. It was administered to all ninth grade girls at Jim Hill Junior High School in Minot, North Dakota. The seven items in the test battery were transformed to norms in the form of percentile scores and then averaged to obtain one fitness score for each subject.

The Moreno Sociometric Device was the testing instrument used to measure social acceptance by their peers. The subjects were instructed to list their five best friends in order, the best friend being number one, etc. These rankings were then weighted on a 6-4-3-2-1 basis which resulted in a Sociometric Index Number for each subject. The Sociometric Index Number and the average fitness score were then correlated by using the Pearson Product Moment Correlation procedure.

The statistical procedure revealed little or no correlation between social acceptance and physical fitness for the ninth grade girls at Jim Hill Junior High School.

CHAPTER I

INTRODUCTION

The Problem

Studies have been conducted in elementary schools and with senior high school boys as to the relationship of athletic ability and social status, or physical fitness levels and social status. In most cases it was found that the students who finished high in physical fitness also rated high in popularity with their peers. This may, or may not be true concerning high school freshman girls. Somewhere between the seventh and ninth grade the importance of physical abilities may diminish as other values become emphasized. In this study, a series of tests (AAHPER Physical Fitness Battery) and a sociogram were administered to a large sample of freshman girls to either support or refute the belief that fitness excellence and social prestige are related among ninth grade girls.

Need for the Study

The objectives of the physical education program are the education of the whole person; that is, his or her social, mental, and physical well-being. Therefore, if physical abilities and the presence of skills do not contribute significantly to a student's social status, the objectives of the physical education program are not being entirely met. If this be the case, physical educators should look into the possibility of doing something to make physical attributes important in the eyes of

the peer group. The highly skilled person is probably envied and respected by her peers, but for these same skills, may not receive any social benefits. It is hoped that the results of this study will reveal the relationship, if it exists, between physical fitness and social prestige.

Physical educators list social acceptance or socialization as one of the major areas of learning in physical education. In elementary school, the skills and abilities of individuals seem to be very important in the eyes of the peer group. The children know the names of the individuals in class that excel in sport activities. These individuals are the ones that are chosen first in team games, and are cheered on in competition, whether they are male or female.

In the case of the female students, one wonders if the importance of physical fitness and skills carry on in the upper grades. If it does, is it still as important when they reach the age of adolescence?

In teaching both ninth grade and seventh grade girls in a junior high school, this researcher feels there is a change somewhere along the way that diminishes the importance of physical abilities by the time the girls have reached the ninth grade. The research and study conducted here may support, or disprove, a theory that a relationship does exist between physical fitness and social status and acceptance by peers among ninth grade girls. If little or no relationship exists, then perhaps physical educators should re-evaluate their programs and become aware of the need for more socialization in their classes.

The manner in which students react in class to certain activities has a lot to do with the atmosphere set up by the teacher. If the class is well planned and the instructor is excited about the unit being

taught, the class will be a happier and a more learned class. Another result of such an environment is the attitude of students toward each other. Socialization and prestige for fitness excellence should be relatively high in such a setting.

The power of peer groups is very intense. If young people believe something is accepted in the eyes of their peers they will work hard to attain it. If, in fact, physical fitness levels are not important as far as the values of the peer group, maybe physical educators should strive to make it so.

Delimitations

This study was delimited to measure nothing more than the relationship that existed between physical fitness and social acceptance among ninth grade girls. The subjects for this study were a non-random sample of 158 ninth grade girls enrolled at Jim Hill Junior High School in Minot, North Dakota.

The AAHPER Youth Fitness Test was the measuring tool used to determine a fitness score, and the Moreno Sociometric Device was the measuring tool for social acceptance. The statistical analysis to determine the correlation coefficient was the Pearson Product Moment procedure. It was arbitrarily decided that a Pearson coefficient of +.50 or greater must be present for the relationship to be significant.

Limitations

This study did not take into consideration any previous experience or physical condition of the body prior to the study. Furthermore, no control was exercised to regulate outside activities or other physical education activities of the subjects.

A possible weakness of this study was the fact that some of the girls had many classes together while other girls had but a few classes together. In rare instances, some of the subjects met only in the physical education class. This limited acquaintship exposure and may have influenced the choice of friends. Also, the subjects were instructed to list only girls in the ninth grade at Jim Hill Junior High School, and it is entirely possible that their best friends were in different grades, or attending other schools.

Definition of Terms

AAHPER - American Association of Health, Physical Education and Recreation.

JUNIOR HIGH SCHOOL - grades seven, eight and nine.

PEER GROUP - A group of individuals of one age level. In this study it shall be restricted to the female sex.

PHYSICAL FITNESS - An all-around well-being. Physical fitness includes more than just muscle tone; it is a state of being fit mentally, emotionally and socially as well.

SOCIOGRAM INDEX - The total points accumulated by each subject in the sociometric device.

SOCIOMETRIC TEST - A test devised to rate the popularity or social scale of the students as selected by the subjects in the study. This study utilized the Moreno Sociometric Testing Device.

CHAPTER II

REVIEW OF LITERATURE

The main objective of a physical education teacher is to help students understand the importance of physical activity for their health, recreation, achievement needs, social life, and for their personal development (Osterman, 1972).

There are many benefits of physical education. One of the benefits as seen by William Morgan (1968) was:

> Psychological Benefits: The importance of physiological well-being in the maintenance of emotional good health is almost universally accepted. Individuals who exercise regularly claim a general feeling of well-being even when there is no significant change in fitness measures. Exercise also helps people to control tensions. Exercise therapy is recognized as an important adjunct in the "total-push" concept of psychiatric rehabilitation. It has been found that a decrease in depression fatigue occurs following exercise. Exercise is also recognized as valuable in cognitive-perceptual motor therapy with disturbed children.

Another important aspect in the program of physical education is the importance of cardiovascular health.

> Individuals engaged in active occupations have a lower incidence rate of heart disease and a better recovery record. Mild exercise increases fat tolerance, activates the fibrinolytic system (pertaining to protein component of the blood), and reduces the chances of internal clotting after surgery. Strenuous exercise is more efficient in producing bradycardia (slowness of the heart) and cardiac hypertrophy (increase in size other than natural growth) with their attendent cardiovascular health benefits (Burt, 1968).

Another benefit of physical education is mental abilities and learning. Although additional research is needed, especially with the "normal" individual, dramatic gains have been noted in the intellectual efficiency of mentally retarded who have had planned programs of physical activity. Significant increases in the I.Q.'s of mentally retarded children have been observed as well as gains in their physical abilities. A low positive relationship has been shown to exist between physical fitness and academic achievement. One cannot be certain whether individuals exhibit greater academic success because they are physically fit or whether individuals who experience greater academic success choose to exercise more frequently than others. It appears, however, that access to opportunity for physical activity is a factor (Williams, 1968).

The ability to move effectively and to perform physical work is dependent in the final analysis upon the control of muscles. Terms such as strength, endurance, coordination, fatigue, and others have been in wide general use for years, yet there is a growing body of research today that seeks to understand their basic elements. The number of adherents to the theories of isometric training is dwindling as new evidence of the superiority of the traditional isotonic methods of training become better known. Recent research indicates that there may be real difference between a single muscle contraction and a repetitive action made over a period of time, suggesting that perhaps the distinction is between the susceptibility to motivation of strength tasks as compared with the tasks of endurance (Clarke, 1968).

The ability to become a member of society, or socialization, is a very important component of the physical education program. While physical education programs lend themselves to providing some of the

necessary conditions for socialization, such as models and social interaction, there is little evidence to support the idea that physical education programs have been particularly effective in preparing students for such diffuse roles as democratic citizens or persons with outstanding moral character. Only when the role, for example, democratic citizen, is characterized in much the same way by several of the child's "significant others," that is, parents, peers, sports and TV heroes, and teachers, can the child be expected to develop that role effectively. When the physical education teacher deliberately plans for this, especially with others, there is no reason to doubt that physical education programs can make a considerable contribution to socialization of boys and girls (Kenyon, 1968).

The physical educator has the responsibility of both instructing his students about the objectives of physical education and of constructing specific programs in the curriculum by which these objectives can be achieved.

The objectives to be developed are:

Organic Efficiency: Develop strong supportive musculature. The physically fit person should be able to produce effort over a long period of time without exhaustion.

Skill in Performing: One enjoys doing something that he can do well.

Knowledges and Understandings: A person can derive great satisfaction from being able to help others in learning a sports technique.

Social Concepts: One of the most significant values of sports and physical fitness is the way in which they contribute to an individual's social awareness. A sportsman learns sportsmanship. In team play, he

realizes the cooperation that is necessary, the enjoyment of striving for a group goal, the ability to lead and follow, and the pleasure and necessity of loyalty to the team (Stanley and Waglow, 1966).

Youth may learn more out of schools than they learn in them, and often they learn more from their peers than from their teachers. If physical educators develop strong, courageous, loyal citizens, conscious of their role in society, then as adults, physical educators must help children to do better things (Fait, 1966).

Lack of success in performance and generally unfavorable physical education experiences are the usual underlying causes of extreme dislike of physical education activities. Students who hate physical education class because they are always last in the race and repeatedly in error when playing ball are very numerous (Fait, 1966).

The wish for recognition is apparent in all age groups. Some gain it in socially approved ways; others find it through exceptional or antisocial behavior. Every child can do some things better than anyone else in their group, and should receive recognition for that ability (Fait, 1966).

The aim of physical education as seen by Vannier and Foster (1966) was:

> To provide opportunities for the individual and the group, to learn activities that are invigorating, developmental, educational, and will lead to positive physical, social, mental, and emotional growth. This aim is to develop each person to his highest potential as a democratic citizen.

The American school has neglected too long to answer the basic needs of pupils. Too frequently little balance between activity and rest has been maintained; often only superior children or the poorly coordinated are singled out for praise or ridicule; all too often the

extreme pressing concern of the pupil for the approval of his classmates is over looked (Vannier and Foster, 1966).

People are not just biological creatures; man is an entity with social, emotional and mental needs as well as physical needs. It is known that physical, mental, emotional and social development are closely interrelated (Peterson, 1964).

Social needs are felt by people of all ages. Everyone needs to belong, feel secure, gain recognition, and be loved. Regardless of age, people need to belong, to be part of a group (Vannier and Foster, 1966).

In a study conducted by Richard Karlgaard (1969), Director of Physical Education and Athletics in the Bismarck Public Schools, it was pointed out that in the elementary school the correlation of physical fitness and social status was in fact, noticeable. Karlgaard is quoted as follows:

> Within the limitations of this study, there appears to be some indication of a correlation between performance levels as measured by the American Association of Health, Physical Education, and Recreation's Youth Fitness Test and social status or peer acceptance as measured by the Cowell Personal Distance Ballot. It would seem, therefore, that giving our elementary school children opportunities to participate in a daily planned program of physical education may not only increase the youngsters' level of fitness and motor skills but, through this, make a positive contribution to his social acceptance.

Anyone observing an elementary physical education class will soon find out who the leaders in the class are. These children not only excel in sports and game activities, but because of their abilities, they are well known and liked by their peer group (Karlgaard, 1969).

In a similar test conducted by Douglas (1966) with senior high school boys, the findings indicated that there was a positive relationship between popularity and physical fitness.

A relatively large number of studies have been executed using group personality tests with both high school and college samples of males. Perhaps the most striking aspect of the research is the coherence of the picture of the athlete which emerges. Since coherence in the area of personality research is the exception and not the rule, this very consistency seems unusual. The athletes were: (a) more outgoing and socially confident, (b) more outgoing and socially agressive, dominant, and leading, (c) higher social adjustment as rated by both teachers and peers, and also higher in prestige and social status, and self confidence, (d) stronger competitors, (e) less anxious and more emotionally stable, (f) less compulsive, (g) greater tolerance for physical pain, (h) lower feminine interests and higher masculine ones (Lowell, 1969).

Students in secondary schools have a real need for satisfying social experiences so they can develop a healthy personality and emotional maturity. These experiences must provide for close friendship, prestige, acceptance and approval by peers. The student needs experiences of leadership and followership, being part of a group, success, failure, along with opportunities to make decisions (Peterson, 1964).

Because tomorrow belongs to the children of today, the future of this nation depends on the educational experiences of youth. Tomorrow's adults must be better, stronger, and more socially sensitive than ever before (Vannier and Foster, 1966).

CHAPTER III

METHODOLOGY

The research for this study was done in a laboratory setting at Jim Hill Junior High School in Minot, North Dakota. The sample for the study was the entire population of ninth grade girls enrolled at that school. The sample was considered to be non-random because the group was intact. The 158 girls involved in the study ranged in age from 14 years old to 16 years old. The subjects were all enrolled in regular physical education classes with approximately 40 students assigned to each of 4 different classes. No attempt was made to exercise control over activities outside of this study.

The purpose of the study was to determine the relationship that did or did not exist between physical fitness and social status among ninth grade girls. The AAHPER Youth Fitness Test was the measuring tool for fitness, and a sociometric testing device was utilized as the measuring tool for social status. The statistical analysis used to determine the correlation coefficient between the two sets of measures was the Pearson Product-Moment Correlation procedure. Monroe calculators were utilized to calculate the data. The paired scores were treated as ungrouped data utilizing the following formula as suggested in a text by Barrow and McGee (1971):

$$r = \frac{N\Sigma XY - (\Sigma X)(\Sigma Y)}{\sqrt{N\Sigma X^2 - (\Sigma X)^2}\sqrt{N\Sigma Y^2 - (\Sigma Y)^2}}$$

Statement of the Null Hypothesis

A significant correlation will not exist between physical fitness and social status among 158 female subjects enrolled in the ninth grade at Jim Hill Junior High School in Minot, North Dakota. For the correlation to be significant, this researcher has arbitrarily selected a positive correlation of .50 and above. Any "r" below the .50 level will be considered insignificant.

Identification of the Tests

The test used to measure social status was the Moreno Sociometric Device (Moreno, 1934) which was recommended to this researcher by Dr. James Brandt, Professor of Psychology and Testing at Minot State College. A sample of this test instrument appears in Table 1, p. 13.

The subjects were informed that they were taking part in an experiment, and that their selection of friends would be kept strictly confidential. The subjects were instructed to write their own name on the front side of a 3 X 5 card, and then turn the card over and list their five best friends in order on the appropriate blank spaces. The friends selected must be female and in the ninth grade at Jim Hill Junior High school. The test score cards were then collected and a sociometric index number for each student was tabulated as follows: Students who received a number one selection were given 6 points, a number two selection was worth 4 points, a number three selection 3 points, etc. Thus, the sociogram index scores were weighted on a 6-4-3-2-1 basis. These scores were not made available to the students.

The test used to measure physical fitness was the AAHPER Youth Fitness Test. It was selected by this researcher on the basis of empirical

TABLE 1

MORENO SOCIOMETRIC SCORE CARD

(front side)

_____

(your name)

(back side)

Your best friend_____

2nd best friend_____

3rd best friend_____

4th best friend_____

5th best friend_____

judgment. This test consists of a battery of seven items designated to give a measure of physical fitness for boys and girls in grades 5-12.

The AAHPER Fitness raw scores were transformed into standard scores in the form of percentiles; from these percentiles, an average percentile of the 7-item test battery was determined. This average percentile was correlated with the sociogram index score to determine if a relationship did, or did not, exist between the two variables in question.

The tests in the AAHPER battery were selected to evaluate specific aspects of physical status which, taken together, give an over-all picture of the young person's general fitness. It is the only fitness test for which national norms have been established. Both age group norms and exponent classification norms are available to the physical educator. In this study, the age group norms were utilized.

The original test battery was developed in 1957 by a special committee of the AAHPER Research Council. It's work was the direct result of a National Conference called in 1956 by President Dwight Eisenhower to consider the fitness of American Youth. President Eisenhower was alerted to the poor physical record of young people through the research studies of Hans Kraus and associates published in the Journal of Health, Physical Education, Recreation and in the Research Quarterly.

The first national norms established for this test were done during the 1957-58 school year under the direction of Dr. Paul Hunsicker, University of Michigan. The Survey Research Center of the University of Michigan was delegated to the task of selecting a nation-wide representative sampling. Five years later, Dr. Hunsicker undertook a second national survey to bring the norms up to date. The technical standards for judging the AAHPER Test appear in the following paragraphs.

OBJECTIVITY: The objectivity of the AAHPER test was enhanced by clear test directions and precise scoring methods. The pre-test and post-test was administered with care so that the results of the tests were similar.

RELIABILITY: The testing was kept as reliable as possible, in that the tester was the same, and the students were the same. Other things considered were: length of test was same, the materials and equipment were the same. There is always a chance of a slight degree of non-reliability in that the student may have been in a different motivational frame or the tester may have presented the test slightly different. However, all things were standardized as much as possible and the testing was believed to be reliable.

VALIDITY: The test battery has established national norms based on a sample of 8500 boys and girls and is accepted as valid. The factors important in the testing were to test the speed, skill, coordination, arm and shoulder strength, abdominal strength, speed and change of direction, and cardio-vascular efficiency. The AAHPER test measures as accurately as possible what it is described as measuring.

PERSONNEL: In administering the test the same tester was used. In addition to the tester, there were student helpers, such as: marker, return thrower, and two measurerers in the softball throw; marker, rake girl, and two people to record the measurement in the long jump. The tester was the recorder and the timer. Each helper was told exactly how to measure and mark and were given several practice sessions in regular physical education class prior to the testing. The total number of helpers was one tester and eight student helpers. A description of the test items appear on the following pages:

ITEM I - FLEXED-ARM HANG. Purpose: to measure arm and shoulder strength. Procedure: The height of the bar should be adjusted to approximately standing height of the subject. The student should grasp the bar with an overhand grip. The subject then raises her body off the floor to a position where the chin is above the bar. The elbows should be flexed and the chest should be close to the bar. Two spotters, one in front and one in back of the subject, are recommended for assistance in getting to the "hang" position. The subject holds the hang position as long as possible. The stop watch is started as soon as the subject assumes the starting position and is stopped when the chin touches the bar, falls below the bar, or when the subject's head is tilted back to keep the chin above the bar.

ITEM II - SIT-UP. Purpose: To measure abdominal strength and endurance. Procedure: The student lies flat on her back with her knees straight and her feet approximately two feet apart. Her fingers are interlocked and placed behing her neck. Her elbows are flat against the floor or mat. Her feet are held by a partner. On the signal to start, the student sits up touching the left elbow to the right knee, returns to the original starting position, sits up again and touches the right elbow to the left knee, and returns. This exercise is repeated, alternating sides. Each time an elbow touches a knee, one point is scored.

ITEM III - SHUTTLE RUN. Purpose: To measure speed and agility. Procedure: The student stands at one of the lines with the two blocks at the other line. On the signal to start, the student runs to the blocks, takes one and returns to the starting line and places the block behind that line. She then returns to the second block which she carries across the starting line on her way back. Two students could run at the

same time if two timers are available, or if one test administrator has a split-second timer, and of course, if there are two sets of blocks. Two trials are permitted. If the students start first at one line and then at the other, it will not be necessary to return the blocks after each race. Sneakers should be worn or the student may run barefooted.

ITEM IV - STANDING BROAD JUMP. Purpose: To measure power of the legs. Procedure: The student stands behind a take-off line with her feet several inches apart. Preliminary to jumping the student dips her knees and swings her arms backward. She then jumps forward by simultaneously extending her knees and swinging her arms forward. Three trials are permitted. Measurement is from the closest heel mark to the take off line. Indoor administration is best accomplished by placing a tape measure on the floor and at right angles to the take-off line and permitting the student to jump along the line. Measurement can then be made by sighting across the tape to the point of the jump. The best jump of the three trials is recorded.

ITEM V - 50 YARD DASH. Purpose: To measure speed. Procedure: After a short warm-up period, the student takes her position behind the starting line. Best results are obtained when two students run at the same time for competition. The starter uses the command, "Are you ready?" and "Go." As she says the latter, she sweeps her arm downward as a signal to the timer. The students run across the finish line. Only one trial is permitted.

ITEM VI - SOFTBALL THROW FOR DISTANCE. Purpose: To measure arm and shoulder coordination. Procedure: Two parallel lines 6 feet apart are placed in the throwing area as restraining lines. The throw must be made from within this area. Scoring is facilitated if the field is

marked off into additional parallel lines 5 yards apart. The student, using an overhand throw, throws the ball straight down the throwing area. Steps may be taken in making the throw provided the student remains in the 6-foot restraining area. Three trials are permitted and taken in succession. Only the farthest throw is measured, using a stake. To facilitate administration, the students are asked to stand by their stakes until several students have thrown. Measurement can then be made of several records.

ITEM VII - 600 YARD RUN-WALK. Purpose: To measure endurance. Procedure: Students may run individually or they may run in groups of a dozen or more. When students run in groups, they should be paired into partners and while one student runs, his partner will listen for the timer to call out his partner's time when he crosses the finish line and relay this time to the scorer. The student may interspace his running with periods of walking and should be encouraged to pace himself. When a group is running, the timer can call out times as each student crosses the finish line.

Each student was provided with a score card which she carried with her from station to station. As she completed the assignment at each station, the judge filled in her raw score for that test item. A sample of this score card appears on Table 2, p. 19.

TABLE 2

AAHPER FITNESS TEST SCORE CARD

Name_____ Grade_____

Date_____ Height_____

Age_____ Weight_____

	Raw Score	Age Group Percentile
Bent-arm hang	_____	_____
Sit-ups	_____	_____
Shuttle run	_____	_____
Standing broad jump . .	_____	_____
50 yard dash.	_____	_____
Softball throw.	_____	_____
600 yard run-walk . . .	_____	_____
Total		_____
Average Percentile.		_____

CHAPTER IV

ANALYSIS OF DATA

The statistical data for this study were obtained by correlating two sets of scores for each of 158 ninth grade girls. This represented a non-random sample of all girls enrolled in this researcher's physical education classes at Jim Hill Junior High School in Minot, North Dakota.

The two variables in this study were physical fitness and social status. A physical fitness test score was obtained by administering the AAHPER Youth Fitness Test to each subject and then assigning them an average percentile score based on age-group norms. The sociometric score was obtained by administering the Moreno Sociometric Device whereby each subject was instructed to list in order their five best girl friends from the entire group of 158 subjects. These ranks were then weighted by assigning 6 points for a first place choice, 4 points for a second place choice, 3 points for a third place choice, etc. The total points accumulated by each subject resulted in a sociometric index number for that subject. The set of sociometric index scores were then correlated with the corresponding fitness scores.

The sociometric index scores ranged from 0 to 39 and had a mean score of 15.8. The AAHPER Youth Fitness Test scores ranged from a low score of 6 percent to a high score of 95 percent. The mean score for the fitness test was 59.8 percent, or well above the national average for that age group.

The Pearson Product-Moment Correlation Coefficient between the two sets of scores yielded a positive .222. For the relationship to be considered significant it had been arbitrarily decided that the Pearson "r" must be at or above +.50. Inasmuch as a +.222 coefficient indicated little or no relationship, the null hypothesis was accepted. The fitness level and social acceptance by peer companions of ninth grade girls at Jim Hill Junior High School was not related enough to be considered significant.

CHAPTER V

DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

The Review of Literature left little doubt that a high positive relationship existed between peer popularity and high physical fitness levels. This was borne out in a study conducted by Karlgaard (1969) with elementary students, and in a research study conducted by Douglas (1966) with senior high school boys. Both of these researchers concluded that there did exist a positive relationship of significance between the variables, fitness and peer popularity. Furthermore, physical educators across the nation continually purport to teach social development in their curriculum.

The results of this study would refute any implication that there exists a universal relationship between fitness levels and social status among all ages and all sexes. This study conducted with ninth grade girls at Jim Hill Junior High School in Minot, North Dakota revealed a very insignificant relationship between the two variables.

Obviously, social acceptance and physical fitness are desirable components of the physical education curriculum. However, the results of this study have indicated that these two objectives are not always met. That is to say, that the quality of one variable has little or no bearing on the quality of the other variable. The values by which the girls in this study have chosen their friends were not affected by fitness levels or physical abilities. In a casual observation by this researcher it was noted that the girls did envy and respect those subjects

that excelled in the fitness test, but quite obviously it had no bearing on their choice of friends.

In conclusion, this researcher would recommend that physical educators make every effort to put fitness excellence back into its proper perspective, and that is one of prestige. If, in the elementary school, the highly skilled is a prestigious individual, then this attitude should not change with age. If it does, perhaps one of the main objectives of the physical education program is being neglected.

SELECTED REFERENCES

Barrow, Harold M, and McGee, Rosemary. A Practical Approach to Measurement in Physical Education. Philadelphia: Lea and Febiger, 1971.

Burt, John J. "Cardiovascular Health." Journal of Health, Physical Education, Recreation, XXXIX (November-December, 1968), 32.

Clarke, David H. "Neuromuscular Consideration." Journal of Health, Physical Education, Recreation, XXXIX (November-December, 1968), 21.

Douglas, Yarnall C. "Relationship of Physical Fitness to Selected Measures of Popularity." Research Quarterly, XXXVII No. 2, (May, 1966), 286.

Fait, Hollis F. Special Physical Education: Adapted, Corrective, Developmental. Philadelphia-London: W. B. Saunders Company, 1966.

Karlgaard, Richard E. "A Comparison of Physical Fitness or Motor Skill Development and Peer Acceptance in Classes of Fifth Grade Boys and Girls," Bismarck, 1969. (Mimeographed.)

Kenyon, Gerald S. "Sociological Considerations." Journal of Health, Physical Education, Recreation, XXXIX (November-December, 1968) 72.

Lowell, Cooper. "Athletics, Activity and Personality: A Review of the Literature." Research Quarterly,XL No.1,(March, 1969), 19.

Moreno, J. L. Who Shall Survive. Washington, D. C.: Nervous and Mental Disease Publishing Company, 1934.

Morgan, William P. "Psychological Considerations." Journal of Health, Physical Education, Recreation, XXXIX (November-December, 1968), 45.

Osterman, Candy. "Lets Do Away With Physical Education." Journal of Health, Physical Education, Recreation, XL (April, 1972), 33.

Peterson, M. F. Physical Education Guide for North Dakota Schools. Bismarck: Department of Public Instruction, 1964.

Stanley, D. K. and Waglow, I. F. Physical Education Handbook. Boston: Allyn and Bacon, Inc., 1966.

Vannier, Mary Helen, and Foster, Mildred. Teaching Physical Education in Elementary Schools. Philadelphia-London: W. B. Saunders Company, 1966.

Williams, Harriet G. "Learning." Journal of Health, Physical Education, Recreation, XXXIX (November-December, 1968), 76.